

WEYMOUTH WOODS SANDHILLS NATURE PRESERVE

PARK PROFILE

PARK PURPOSE STATEMENT

The Weymouth Woods Sandhills Nature Preserve is a unique state park unit. It was the first designated State Natural Area (SNA) in the state park system and is one of only two such areas that are managed by on-site staff. The name Weymouth Woods was given by former owner James Boyd because the pines reminded him of those he had seen in Weymouth, England. In 1963, James Boyd's widow donated 403 acres to the state with the condition that the property "be maintained as a nature preserve and be used for the primary purposes of nature and wildlife education and study and research into methods of conservation, and shall not be used for general recreation or any other purpose inconsistent with the primary purposes above set forth". The state subsequently adopted "Principles Governing the Establishment, Extension and Development of State Park Natural Areas of the State of North Carolina", and Weymouth Woods was then designated as an SNA.

The Weymouth Woods Sandhills Nature Preserve is located in the Sandhills region of the Coastal Plain. It consists of three sections: Weymouth Woods (511 acres), Boyd Estate (153 acres) and Paint Hill (234 acres) for a total of 898 acres. On January 10, 1995, the state designated 679 acres of these lands as Dedicated Nature Preserve. This preserve protects representative examples of most of the natural communities found in the North Carolina Sandhills. Not only are xeric upland communities present at the preserve but a variety of wetland communities are present as well, particularly along James Creek which traverses the Weymouth Woods section.

The upland areas of the three sections are dominated by longleaf pine (*Pinus palustris*) over a subcanopy of various scrub oaks, particularly turkey oak (*Quercus laevis*). Natural or prescribed fire is necessary to maintain the natural character of the pine forests. Without fire, the oaks shade out the herbaceous layer and reduce plant diversity. The upland areas are home to the federally-listed endangered red-cockaded woodpecker (*Picoides borealis*), which requires old-growth pines and a near absence of hardwood understory for survival. The fox squirrel (*Sciurus niger*), designated by the Natural Heritage Program as significantly rare, is present at several places on the preserve. Six significantly rare species of butterfly have also been recorded within the preserve's boundaries.

The Boyd section contains an old-growth stand of longleaf pines, with many trees exceeding 200–400 years of age. This is the most mature large stand of longleaf pine in the state and it is nationally significant.

The Paint Hill section contains an unusual variant of longleaf pine/scrub oak vegetation. This section contains extensive clay lenses that produce hardpans near the surface. Wetland plants such as creeping blueberry (*Vaccinium crassifolium*) and titi (*Cyrilla racemiflora*) thrive on the rolling hilltops in this unusual natural area. This section also contains a population of the Sandhills pyxie-moss (*Pyxidanthra barbulata* var. *brevifolia*), which is designated as endangered by the N.C. Plant Conservation Program.

The Weymouth Woods section contains the majority of the preserve's wetlands. These wetlands, which occur primarily along James Creek, include Coastal Plain Small Stream Swamps and Streamhead Pocosins. Bog spicebush (*Lindera subcoriacea*), a NC PCP endangered species, grows along this creek. Rare animal species found along the creek include the pine barrens treefrog (*Hyla andersonii*) and the Sandhills chub (*Semotilus lumbee*). The rare Sandhills bog lily (*Lilium iridollae*) grows in a Streamhead Pocosin ecotone in this section.

Most of the sands capping ridges in the Sandhills region belong to the Pinehurst Formation of Tertiary age. Geologists do not agree on the origin of these sands. Many once thought that the sands were wind-blown in origin. Recent studies suggest that they formed in a shallow, relatively quiet water embayment. Similar sands of marine origin in nearby Harnett county are described as Eocene in age. Eocene age rocks also occur south of Weymouth Woods. Regardless of the origin of the Pinehurst Formation, the surface sands have been reworked by winds during recent times. The sandy soils at the top of the ridges and clay soils in other areas create an interesting hydrology and soil chemistry that directly affect the kinds of plants that grow in various locations on the preserve. The name Paint Hill derives from an abundance of exposed red iron ore (hematite). The red color runs off easily and was supposedly used by Native Americans as a body paint. Hematite was formed when iron leaked into the clay and sand where water has settled. The construction of roads and subsequent soil erosion has exposed many “paint rocks”.

Most visitors speak of the enduring scenic qualities of the preserve. They herald the tall, stately pines, the sandy ridges covered with wiregrass and low shrubs, and the open character of the forest. This open forest affords excellent opportunities to view the diverse wildlife inhabiting the preserve.

The preserve’s primary cultural significance is the evidence of human exploitation of the longleaf pine. Many trees in the Weymouth Woods Section wear the telltale “cat-faced” scars. These were caused by the slashing of V shapes in the bark to enhance the flow of sap, which supported the extensive naval stores industry in the late 1800s and early 1900s. Occasional finds of hand-worked stone points provide evidence that the preserve was used by Native Americans.

Weymouth Woods SNP offers opportunities for hiking, equestrian use, wildlife observation and photography in the quiet solitude of the Sandhills and pine forests. It is a place where you can see how human actions have affected the environment and where you can learn about, and quite possibly see, rare and endangered species like the red-cockaded woodpecker, the pine barrens treefrog, the bog spicebush and the Sandhills pyxie-moss.

Weymouth Woods SNP was established to restore and maintain a portion of the unique longleaf pine community and to portray and interpret the natural features and processes relative to the Sandhills region. The Division of Parks and Recreation is responsible for managing and protecting the natural, cultural and recreational resources at Weymouth Woods Sandhills Nature Preserve.

PRIMARY INTERPRETIVE THEMES

Ecology of the Sandhills: This theme incorporates the physical and biological characteristics of the fire-dependent longleaf pine community found in the Sandhills. Educational programs emphasize the importance of fire in maintaining this community type and illustrate how plants and animals have adapted to these conditions. Interpretation of this theme is accomplished through slide talks, lectures, hikes, hands-on activities and on-site sampling. The ecology of the Sandhills is the major focus of the preserve’s Environmental Education Learning Experience (EEL) and museum.

The Longleaf Pine Forest: Weymouth Woods contains some of the oldest longleaf pine trees remaining in the state. Park visitors learn about the life history, historical importance and environmental value of the native longleaf pine through slide talks, hikes and hands-on activities from the preserve’s EEL. A new exhibit on the longleaf pine is being planned for the museum renovation.

Fire Ecology: Longleaf pine forests are plant communities adapted to periodic burning, their survival depends on fire. Understandably, park visitors familiar with the Smokey Bear message have many questions and concerns about the use of fire. Through audio-visual programs, hikes, hands-on activities and museum exhibits, the staff conveys the importance of fire to the maintenance of the Sandhills ecosystem and describes the techniques used for conducting prescribed burns on the preserve.

STATISTICS

Visitation (1999)	22,138
Operating Budget (FY 98-99)	\$ 219,730
Revenue (FY 98-99)	\$ 1,080

VISITOR FACILITIES

Picnic area	7 Hiking trails (5.6 miles total)
Visitor center	Exhibit hall
2 Bridle trails (3.5 miles total)	

CONSTRUCTION AND RENOVATION NEEDS

1	The building renovation project will make renovations to the auditorium including new carpeting, replacing 100 folding chairs and 5 folding tables, new sound system, new lighting system, ceiling fans and ADA doors. A 2000 sq. ft. addition to the office building will enable moving the library area to the ground floor making it ADA accessible and placing staff offices on the second floor. The existing office will be carpeted.	\$ 73,253
2	The ranger residence project will provide on-site security for the office/shop complex and is a park standard 1560 sq. ft. residence	192,512
3	The maintenance area improvement project will add a hydraulic lift to the 2-bay vehicular storage shed.	295,255
TOTAL:		\$ 561,020

REGISTERED/DEDICATED NATURAL AREAS

Portions of all three sections of Weymouth Woods Sandhills Nature Preserve have been designated as Dedicated Nature Preserves by the state. The dedicated areas total 679 acres. In addition, the Carolina Power and Light powerline easement has been registered as a natural area with the Natural Heritage Program under a memorandum-of-understanding. This registered natural area is located on the northeast section of the Weymouth Woods section.

Weymouth Woods Dedicated Nature Preserve: The Weymouth Woods section Dedicated Nature Preserve totals 455 acres and contains the majority of the wetlands in the preserve. The wetlands, primarily along James Creek, include coastal plain small stream swamps and streamhead pocosins. The state-listed endangered bog spicebush grows along this creek and the rare pine barrens tree frog and sandhills chub have also been found along James Creek and its tributaries. At present, this section is home to two active red-cockaded woodpecker colonies.

Boyd Estate Dedicated Nature Preserve: Of particular note at the Boyd section is an old-growth stand of longleaf pines, with many of the trees between 200 to 448 years old. Not surprisingly, this stand of trees is one of the most mature stands of longleaf pine in the state. Two colonies of red-cockaded woodpeckers are currently present at the Boyd section's Dedicated Nature Preserve which totals 145 acres.

Paint Hill Dedicated Nature Preserve: The Paint Hill section Dedicated Nature Preserve, totaling 79 acres, contains an unusual variant of longleaf pine/scrub oak vegetation that results from the presence of extensive clay lenses that trap moisture at the surface. Consequently, more typically wetland species such as titi and sweet pepperbush are present on the hilltops of this section. A number of populations of the state-listed endangered pyxie-moss are also found on this section.

FUTURE LAND ACQUISITION NEEDS

Completion of the Weymouth Woods master plan will require the acquisition of 685 acres. High priority acquisitions include several tracts of land at Paint Hill necessary for resource protection, a habitat corridor between Weymouth Woods and Fort Bragg to increase the long term viability of some wildlife populations including the red-cockaded woodpecker and fox squirrel and the Paint Hill Farm property in order to afford more protection of the very rare and unusual natural community of Clay Hilltop variant Pine/Scrub Oak Sandhill and large areas of longleaf pine. Also of concern are more management options regarding recreation facilities and public access to the site.

Master Plan Total Acreage	1,583 acres
Current Park Acreage	<u>898 acres</u>
Acquisition Needs	685 acres

2000 STAFF POSITIONS

Permanent		Seasonal		Peak Load	
Park Superintendent II	1	Park Attendant	1	Park Attendant	1
Park Ranger II	2			Naturalist	1
Maintenance Mechanic III	1				
Office Assistant III	1				

PROPOSED STAFF ADDITIONS

Permanent		Seasonal		Peak Load	
Environmental Specialist	1	Assistant Park Ranger	1		
		General Utility Worker	1		